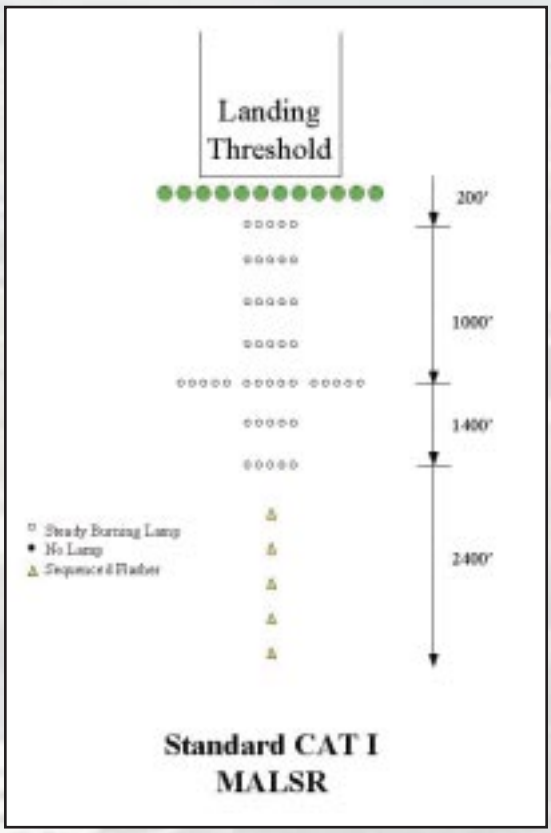
FAA William J. Hughes Technical Center

Category I Reconfigurable Approach Lighting System Test Bed (RALST)

The Airport Technology Research and Development Branch, Airport Safety Technology Section has a Category I Reconfigurable Approach Lighting System Test Bed at the Atlantic City International Airport, New Jersey.



The test bed consists of seven 5-lamp barrettes spaced 200 feet apart starting 200 feet in front of the threshold of Runway 4. At the 1000-foot station two additional barrettes of 5 lamps are on either side of the 5-lamp barrette. From the 1600- to the 2400-foot station, 5 strobes are spaced 200 feet apart (1 strobe per station). This configuration is identical to the current U.S. standard CAT I Medium Intensity Approach Lighting System Runway Alignment Indicator Lights (MALSR) (pictured above).

On the test bed however, the lamps on each barrette are individually controlled for maximum flexibility in approach lighting research and development (see picture on the next page). External power is provided at each station to provide for new technology research.

The test bed will provide the flexibility to evaluate configurations different from the standard by adding and/or relocating the individual barrettes. This flexibility will also enable the evaluation of new technologies different from the 25-year-old technology in the current standard system.

The test bed is currently being used in support of the Approach Lighting Research and Development project. The goal is to reduce overall life cycle costs (acquisition, installation, and maintenance), and possibly required real estate, while providing the same or improved visual cues for the pilot to complete the approach and landing operations safely.

To find out more about the Reconfigurable Approach Lighting System Test Bed, contact:

Airport and Aircraft Safety Research and Development Division

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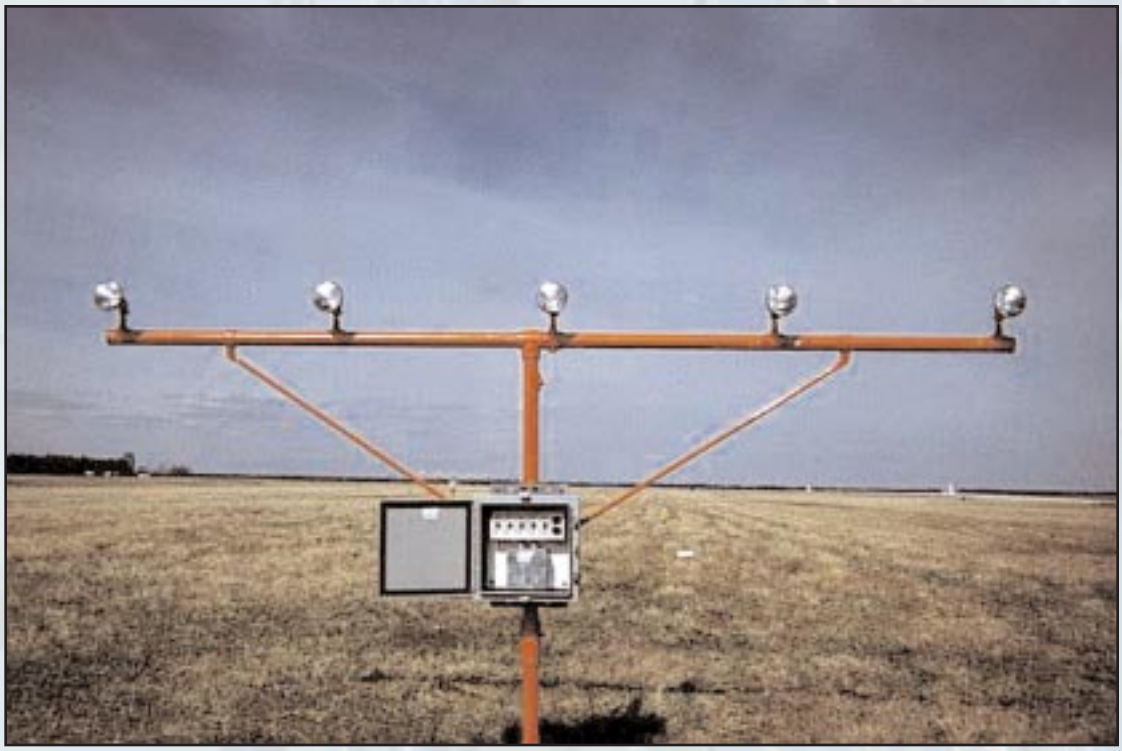
R&D Facts



Individually controlled 5 Lamp Barrette